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ABSTRACT

This document contains the occupational duty/task lists for 11 occupations in the diesel mechanics series. Each occupation is divided into a number of duties. A separate page for each duty in the occupation lists the tasks in that duty along with its code number and columns to indicate whether that particular duty has been taught and to provide space for comments. The occupations are tool room attendant; electrical repairman; cab climate control repairman; mechanic's helper; transmission/final drive mechanic; engine repairman; tune-up technician (fuel systems); hydraulics repairman; frame, suspension (brakes) and steering repairman; service/maintenance person (tires and detail); and farm equipment repair person. The occupational duty/task lists are the result of an extensive two-step development process in which information on current occupational requirements was gathered from such sources as consortia, trade associations, and current curriculum materials and was then synthesized by industry representatives, vocational instructors, and state-level representatives. (KC)

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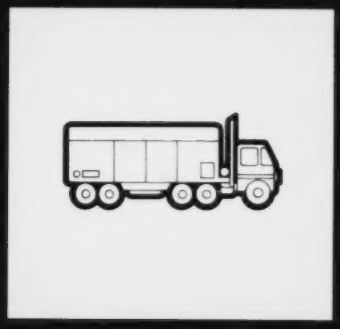

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TOOL ROOM ATTENDANT
ELECTRICAL REPAIRMAN
CAB CLIMATE CONTROL REPAIRMAN
MECHANIC'S HELPER
TRANSMISSION / FINAL DRIVE MECHANIC
ENGINE REPAIRMAN
TUNE-UP TECHNICIAN (FUEL SYSTEMS)
HYDRAULICS REPAIRMAN
FRAME, SUSPENSION (BRAKES) & STEERING REPAIRMAN
SERVICE / MAINTENANCE PERSON (TIRES & DETAIL)
FARM EQUIPMENT REPAIR PERSON

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2

OKLAHOMA OCCUPATIONAL TESTING CENTER

OKLAHOMA OCCUPATIONAL TESTING CENTER

INTRODUCTION:

Today's vocational instructors and administrators are faced with a myriad of important questions. They are searching for methods of providing accountability for students' acquisition of knowledge and skills as related to a constantly changing job market.

The Oklahoma Occupational Testing Center is in the business of eliminating some of the guesswork in answering today's tough questions. The professional staff, using a thorough and valid methodology, has developed duty/task lists for over 150 occupations in vocational education. Additional occupational duty/task lists will be made available as development is completed. These duty/task lists will help answer the following questions:

- Are students being prepared for today's jobs?
- What should today's vocational instructors be teaching?
- Is the curriculum addressing industry needs and is it up-to-date?
- How can vocational programs be improved?
- What in-service programs are needed for instructors?

BACKGROUND:

The occupational duty/task lists are the result of an extensive development process. Information regarding the occupational skills needed for employment is gathered from a number of sources such as consortia, trade associations, and current curriculum materials. This information is then synthesized by: 1) industry representatives, 2) vocational instructors, and 3) state level vocational representatives. The end result is a listing of occupations and the specific duties and tasks within each occupation. After dissemination for field review a committee of industry and vocational representatives revise the duty/task list to its final form.

USES:

The Oklahoma Occupational Testing Center's Duty/Task Lists are designed to be of value to a vocational program in several ways:

- Improving program planning
- Documenting industrial standards
- Evaluating curriculum and instruction
- Tracking individualized instruction*
- Using as a discussion tool with advisory committees
- Developing up-to-date job descriptions
- Performing self-evaluations
- Performing administrative program evaluations

INFORMATION:

To find out more about the Oklahoma Occupational Testing Center, call toll free:
1-800-654-4502.
Ask for our free catalog, listing over 150 occupations for which duty/task lists are available. CIMC curriculum materials related to these lists may also be available.

*A Progress Chart is provided for tracking individualized instruction.

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Oklahoma Occupational Testing Center

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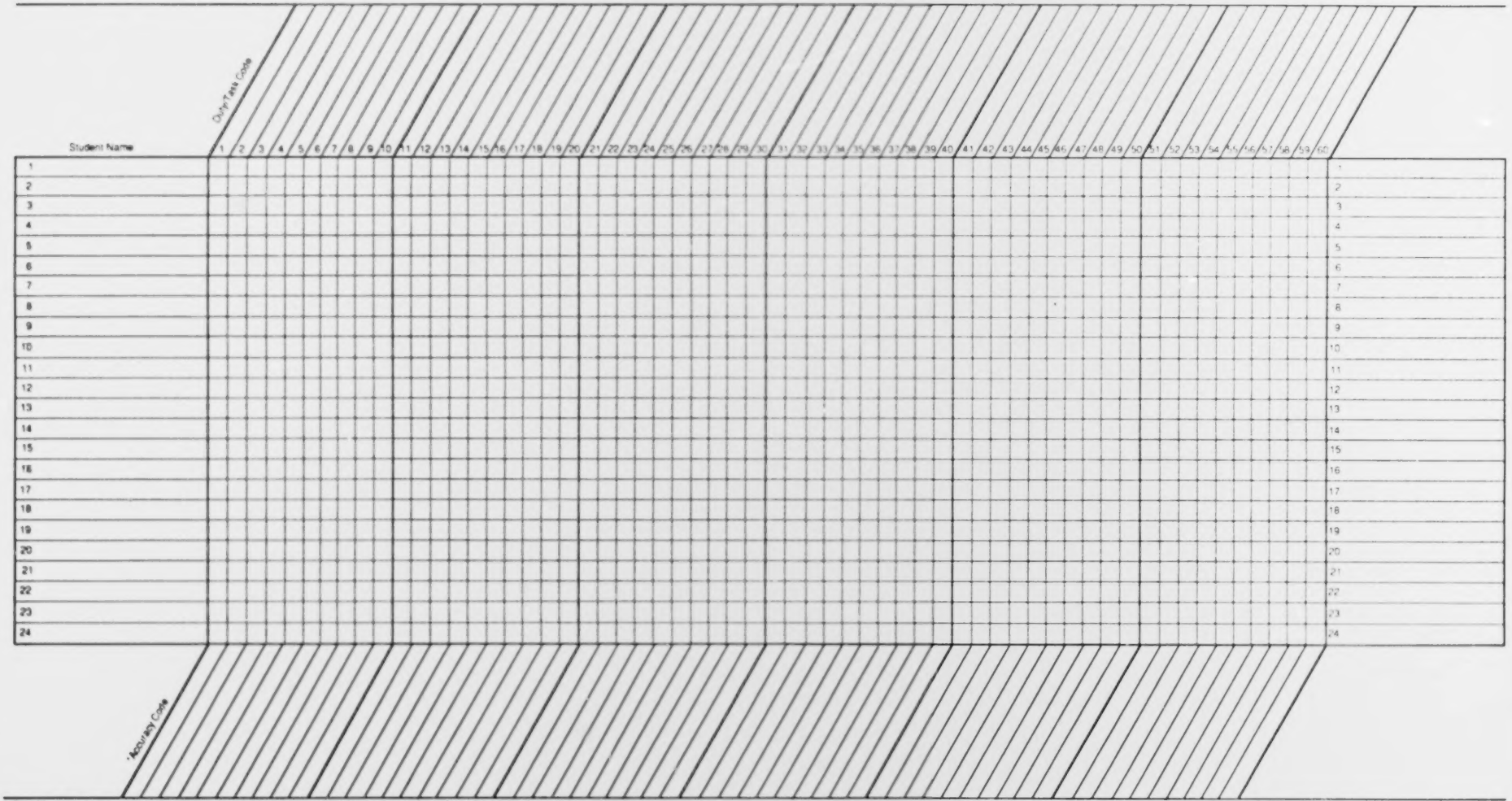
PROGRESS CHART

OKLAHOMA OCCUPATIONAL TESTING CENTER

Program

Oklahoma State Department of Vocational and Technical Education

Date



* 0 = No exposure - no information nor practice provided during training program; complete training required.
1 = Exposure only - general information provided with no practice time; close supervision needed and additional training required.
2 = Limited practice - has practiced during training program; additional training is required to develop skill.
3 = Moderately skilled - has performed independently during training program; limited additional training may be required.
4 = Skilled - can perform independently with no supervision.

This chart may be duplicated as needed.

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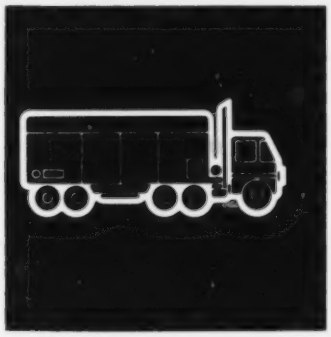
**This chart is intended for teacher file use only. Do not post.

DUTY/TASK LISTS

DIESEL MECHANICS SERIES

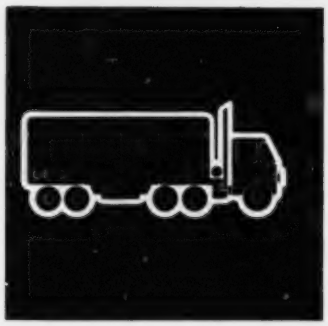


OCCUPATIONS:

1. Tool Room Attendant
2. Electrical Repairman
3. Cab Climate Control Repairman
4. Mechanic's Helper
5. Transmission/Final Drive Mechanic
6. Engine Repairman
7. Tune-Up Technician (Fuel Systems)
8. Hydraulics Repairman
9. Frame, Suspension (Brakes), & Steering Repairman
10. Service/Maintenance Person (Tires & Detail)
11. Farm Equipment Repair Person

DUTY/TASK LIST

DIESEL MECHANICS SERIES



OCCUPATION 1: TOOL ROOM ATTENDANT

DUTY: C. Account for Tools and Instruments

OKLAHOMA OCCUPATIONAL TESTING CENTER

OCCUPATION: TOOL ROOM ATTENDANT

DUTY: Account for Tools and Instruments

CODE	TASK	TAUGHT	COMMENTS
C.01	Identify and describe uses of hand tools		
C.02	Identify and describe uses of shop measurement instruments		
C.03	Maintain accountability of shop tools and instruments		
C.04	Identify and describe special tools		
C.05	Maintain special tools		
C.06	Inventory expendable items and supplies		

DUTY/TASK LIST

DIESEL MECHANICS SERIES

OCCUPATION 2: ELECTRICAL REPAIRMAN

DUTIES:
- F. Perform Engine Tune-Up
- J. Maintain and Service the Charging Circuit
- K. Maintain and Service the Starting Circuit
- L. Maintain and Service Vehicle Accessories

OKLAHOMA OCCUPATIONAL TESTING CENTER

OCCUPATION: ELECTRICAL REPAIRMAN

DUTY: Perform Engine Tune-Up

CODE	TASK	TAUGHT	COMMENTS
F.19	Remove and replace fuel level sending unit		
F.20	Remove and replace fuel injection computer		
F.21	Test wiring harness of electronic fuel injection computer		
F.22	Remove and replace wiring harness of electronic fuel injection system		

OCCUPATION: ELECTRICAL REPAIRMAN

DUTY: Maintain and Service the Charging Circuit

CODE	TASK	TAUGHT	COMMENTS
J.01	Replace amperage gauge		
J.02	Remove, repair, and replace alternator		
J.03	Test charging circuit		
J.04	Service batteries and cables		
J.05	Interpret schematics of charging system		

OCCUPATION: ELECTRICAL REPAIRMAN

DUTY: Maintain and Service the Starting Circuit

CODE	TASK	TAUGHT	COMMENTS
K.01	Check ignition switch		
K.02	Check safety switches		
K.03	Check solenoid		
K.04	Remove, repair, and replace starter		
K.05	Perform starter current-draw test on vehicle		
K.06	Replace starter motor solenoid		
K.07	Interpret schematics for starting circuits		

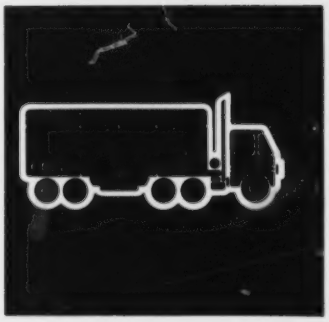
OCCUPATION: ELECTRICAL REPAIRMAN

DUTY: Maintain and Service Vehicle Accessories

CODE	TASK	TAUGHT	COMMENTS
L.01	Interpret schematics of systems		
L.02	Check/repair tractor/trailer lights		
L.03	Remove and replace electrical relay		
L.04	Remove and replace or repair turn signal unit		
L.05	Rewire "7" way trailer plug and cord		
L.06	Remove and replace dash gauges and switches		

DUTY/TASK LIST

DIESEL MECHANICS SERIES



OCCUPATION 3: CAB CLIMATE CONTROL REPAIRMAN

DUTIES:
- B. Maintain and Service Cooling System
- J. Maintain and Service the Charging Circuit
- O. Maintain and Service Cab Climate System

OKLAHOMA OCCUPATIONAL TESTING CENTER

15

OCCUPATION: **CAB CLIMATE CONTROL REPAIRMAN**

DUTY: **Maintain and Service Cooling System**

CODE	TASK	TAUGHT	COMMENTS
B.01	Replace fan and auxiliary belts		
B.02	Check intercooler core		
B.03	Replace water filter		
B.04	Replace radiator		
B.05	Reverse flush radiator		
B.06	Replace thermostat		
B.07	Replace expansion plugs		
B.08	Test cooling system		
B.09	Replace radiator hose		
B.10	Test radiator pressure cap		

OCCUPATION: CAB CLIMATE CONTROL REPAIRMAN

DUTY: Maintain and Service the Charging Circuit

CODE	TASK	TAUGHT	COMMENTS
J.01	Replace amperage gauge		
J.02	Remove, repair, and replace alternator		
J.03	Test charging circuit		
J.04	Service batteries and cables		
J.05	Interpret schematics of charging system		

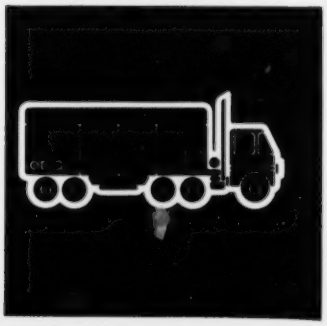
OCCUPATION: CAB CLIMATE CONTROL REPAIRMAN

DUTY: Maintain and Service Cab Climate System

CODE	TASK	TAUGHT	COMMENTS
0.01	Repair or remove and replace climate control system components		
0.02	Service air filter		
0.03	Check climate control system for satisfactory operation		
0.04	Troubleshoot climate control system		
0.05	Evacuate system		
0.06	Check refrigerant level		
0.07	Recharge refrigerant		
0.08	Interpret schematics for cab climate system		

DUTY/TASK LIST

DIESEL MECHANICS SERIES



OCCUPATION 4: MECHANIC'S HELPER

DUTIES:
- A. Perform Pre-Service/Repair Tests
- B. Maintain and Service Cooling System
- D. Maintain and Service Cylinder Heads
- E. Maintain and Service Drive Train

OKLAHOMA OCCUPATIONAL TESTING CENTER

OCCUPATION: MECHANIC'S HELPER

DUTY: Perform Pre-Service/Repair Tests

CODE	TASK	TAUGHT	COMMENTS
A.01	Measure generator/alternator output		
A.02	Test glow plugs		
A.03	Test fuel pump		
A.04	Test coolant		
A.05	Check oil pressure		
A.06	Test engine compression		
A.07	Test for cylinder leakage		
A.08	Test engine vacuum or manifold pressure		
A.09	Test for cylinder balance		
A.10	Check engine timing		

OCCUPATION: MECHANIC'S HELPER

DUTY: Maintain and Service Cooling System

CODE	TASK	TAUGHT	COMMENTS
B.01	Replace fan and auxiliary belts		
B.02	Check intercooler core		
B.03	Replace water filter		
B.04	Replace radiator		
B.05	Reverse flush radiator		
B.06	Replace thermostat		
B.07	Replace expansion plugs		
B.08	Test cooling system		
B.09	Replace radiator hose		
B.10	Test radiator pressure cap		

OCCUPATION: MECHANIC'S HELPER

DUTY: Maintain and Service Cylinder Heads

CODE	TASK	TAUGHT	COMMENTS
D.01	Remove and replace head		

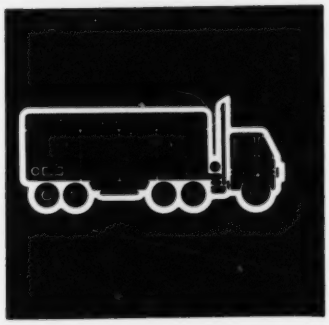
OCCUPATION: MECHANIC'S HELPER

DUTY: Maintain and Service Drive Train

CODE	TASK	TAUGHT	COMMENTS
E.01	Remove and reinstall transmission		
E.02	Remove and replace single-plate clutch (transmission removed)		
E.03	Remove and replace two-plate clutch (transmission removed)		
E.04	Replace flywheel drive lugs for two-plate clutch		
E.06	Remove and replace clutch release bearing		
E.07	Replace pilot bearing		
E.22	Remove and reinstall driveline		
E.24	Remove and replace universal joints		
E.26	Remove and replace driveline center bearings		
E.27	Remove and replace rear differential carrier assembly in tandem		
E.29	Remove and reinstall front differential carrier assembly in tandem		

DUTY/TASK LIST

DIESEL MECHANICS SERIES



OCCUPATION 5: TRANSMISSION/FINAL DRIVE MECHANIC

DUTIES:
- E. Maintain and Service Drive Train
- I. Perform General Maintenance Tasks
- M. Service and Maintain Hydraulic Brakes
- N. Service and Maintain Air Brakes

OKLAHOMA OCCUPATIONAL TESTING CENTER

OCCUPATION: TRANSMISSION/FINAL DRIVE MECHANIC

DUTY: Maintain and Service Drive Train

CODE	TASK	TAUGHT	COMMENTS
E.01	Remove and reinstall transmission		
E.02	Remove and replace single-plate clutch (transmission removed)		
E.03	Remove and replace two-plate clutch (transmission removed)		
E.04	Replace flywheel drive lugs for two-plate clutch		
E.05	Align engine flywheel housing		
E.06	Remove and replace clutch release bearing		
E.07	Replace pilot bearing		
E.08	Rebuild 4- or 5-speed manual transmission for medium-duty truck		
E.09	Rebuild auxiliary transmission		
E.10	Remove and replace transmission air shift mechanisms		
E.11	Rebuild air shift mechanism		
E.12	Overhaul twin countershaft transmission		
E.13	Overhaul three countershaft transmission		
E.14	Replace transmission input shaft separate from transmission overhaul		
E.15	Replace speedometer drive gear separate from transmission overhaul		
E.16	Remove and replace shift lever housing from transmission separate from transmission overhaul		
E.17	Rebuild shift lever housing		
E.18	Remove, repair, and replace remote shifter		

OCCUPATION: TRANSMISSION/FINAL DRIVE MECHANIC

DUTY: Maintain and Service Drive Train (Continued)

CODE	TASK	TAUGHT	COMMENTS
E.19	Remove and replace automatic transmission		
E.20	Rebuild automatic and/or power shift transmission		
E.21	Rebuild torque converter (non-sealed units)		
E.22	Remove and reinstall driveline		
E.23	Set angularity of driveline		
E.24	Remove and replace universal joints		
E.25	Remove and replace yoke (driveline removed)		
E.26	Remove and replace driveline center bearings		
E.27	Remove and replace rear differential carrier assembly in tandem		
E.28	Rebuild rear differential carrier assembly		
E.29	Remove and reinstall front differential carrier assembly in tandem		
E.30	Rebuild front differential carrier assembly		
E.31	Remove and reinstall inter-axle differential		
E.32	Rebuild inter-axle differential		
E.33	Rebuild limited slip differential		
E.34	Replace pinion seal separate from carrier overhaul		
E.35	Remove, repair, and replace power take-off assembly		

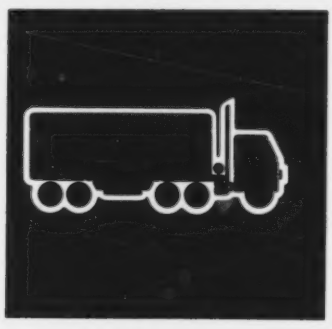
OCCUPATION: TRANSMISSION/FINAL DRIVE MECHANIC

DUTY: Perform General Maintenance Tasks

CODE	TASK	TAUGHT	COMMENTS
I.01	Adjust wheel bearings		
I.02	Re-pack wheel bearings		
I.03	Check tires for pressure, wear, and defects		
I.04	Service universal joints and lubricate chassis		
I.05	Change engine oil and filters		
I.06	Drain, refill, and check transmission/ differential lubricant levels		
I.07	Drain air tanks		
I.08	Service the air drier		
I.09	Adjust clutch for free play		
I.10	Adjust stop brake		
I.11	Adjust parking brake		
I.12	Clean engine		
I.13	Remove and install exhaust pipe		
I.14	Remove and install muffler and tail pipe		
I.15	Fill out repair orders		
I.16	Complete parts requisition forms		
I.17	Read and interpret parts arrangement prints, service manuals, and service assembly instructions		
I.18	Lubricate fan bearings		
I.19	Identify tire, rim, type, and size		
I.20	Install wheel on truck using impact tool		

DUTY/TASK LIST

DIESEL MECHANICS SERIES



OCCUPATION 7: TUNE-UP TECHNICIAN (FUEL SYSTEMS)

DUTIES:
- A. Perform Pre-Service/Repair Tests
- B. Maintain and Service Cooling System
- D. Maintain and Service Cylinder Heads
- F. Perform Engine Tune-Up
- I. Perform General Maintenance Tasks
- J. Maintain and Service the Charging Circuit
- K. Maintain and Service the Starting Circuit

OKLAHOMA OCCUPATIONAL TESTING CENTER

OCCUPATION: TRANSMISSION/FINAL DRIVE MECHANIC

DUTY: Perform General Maintenance Tasks (Continued)

CODE	TASK	TAUGHT	COMMENTS
I.21	Use tire changer and/or hand tools to remove and replace tire and tubes		
I.22	Inspect and/or repair tires or tubes		

OCCUPATION: **TRANSMISSION/FINAL DRIVE MECHANIC**

DUTY: **Service and Maintain Hydraulic Brakes**

CODE	TASK	TAUGHT	COMMENTS
M.01	Identify types and grades of brake fluid		
M.02	Check master cylinder fluid unit and fill to proper level		
M.03	Inspect brake lines for condition and leaks		
M.04	Measure brake pedal height and perform required adjustments		
M.05	Bleed brakes using approved equipment and procedure		
M.06	Diagnose brake system problems - hydraulic		
M.07	Rebuild hydraulic brake master cylinder		
M.08	Rebuild hydraulic slave (wheel) cylinder		
M.09	Remove and replace power brake unit		
M.10	Service drums, calipers, and rotors		

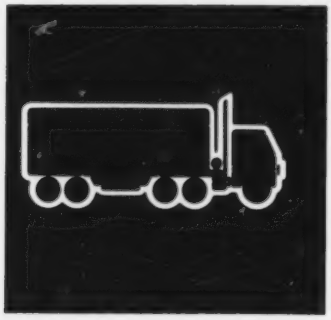
OCCUPATION: **TRANSMISSION/FINAL DRIVE MECHANIC**

DUTY: **Service and Maintain Air Brakes**

CODE	TASK	TAUGHT	COMMENTS
N.01	Test and diagnose air brake system		
N.02	Remove and replace air compressor		
N.03	Service air brake system plumbing		
N.04	Remove and replace service brake chamber diaphragm		
N.05	Remove and replace brake shoes		
N.06	Overhaul air brake actuator assemblies		
N.07	Remove, rebuild, and replace spring brake chambers		
N.08	Remove, replace, or adjust air governor		
N.09	Repair, replace, or adjust air pressure relief valve		
N.10	Interpret schematics for air brakes		

DUTY/TASK LIST

DIESEL MECHANICS SERIES



OCCUPATION 6: ENGINE REPAIRMAN

DUTIES:
- A. Perform Pre-Service/Repair Tests
- B. Maintain and Service Cooling System
- D. Maintain and Service Cylinder Heads
- E. Maintain and Service Drive Train
- F. Perform Engine Tune-Up
- G. Rebuild Engine
- L. Maintain and Service Vehicle Accessories

OKLAHOMA OCCUPATIONAL TESTING CENTER

OCCUPATION: ENGINE REPAIRMAN

DUTY: Perform Pre-Service/Repair Tests

CODE	TASK	TAUGHT	COMMENTS
A.01	Measure generator/alternator output		
A.02	Test glow plugs		
A.03	Test fuel pump		
A.04	Test coolant		
A.05	Check oil pressure		
A.06	Test engine compression		
A.07	Test for cylinder leakage		
A.08	Test engine vacuum or manifold pressure		
A.09	Test for cylinder balance		
A.10	Check engine timing		

OCCUPATION: ENGINE REPAIRMAN

DUTY: Maintain and Service Cooling System

CODE	TASK	TAUGHT	COMMENTS
B.01	Replace fan and auxiliary belts		
B.02	Check intercooler core		
B.03	Replace water filter		
B.04	Replace radiator		
B.05	Reverse flush radiator		
B.06	Replace thermostat		
B.07	Replace expansion plugs		
B.08	Test cooling system		
B.09	Replace radiator hose		
B.10	Test radiator pressure cap		

OCCUPATION: ENGINE REPAIRMAN

DUTY: Maintain and Service Cylinder Heads

CODE	TASK	TAUGHT	COMMENTS
D.01	Remove and replace head		
D.02	Check head for cracks		
D.03	Check head for warp		
D.04	Water test cylinder heads		
D.05	Inspect rocker arms and shafts for cracks and wear, recondition wear surfaces, replace shaft bushings, and install assembly to head		
D.06	Remove valves from head		
D.07	Check valve guide wear		
D.08	Replace valve guides		
D.09	Grind valves		
D.10	Grind valve seats		
D.11	Test/replace valve springs		

OCCUPATION: ENGINE REPAIRMAN

DUTY: Maintain and Service Drive Train

CODE	TASK	TAUGHT	COMMENTS
E.02	Remove and replace single-plate clutch (transmission removed)		
E.03	Remove and replace two-plate clutch (transmission removed)		
E.04	Replace flywheel drive lugs for two-plate clutch		
E.05	Align engine flywheel housing		
E.06	Remove and replace clutch release bearing		
E.07	Replace pilot bearing		

OCCUPATION: ENGINE REPAIRMAN

DUTY: Perform Engine Tune-Up

CODE	TASK	TAUGHT	COMMENTS
F.01	Adjust valves according to manufacturer's specifications		
F.02	Time fuel injectors (Detroit)		
F.03	Make preliminary governor adjustment (Detroit)		
F.04	Adjust injector control racks (Detroit)		
F.05	Make final governor adjustments (Detroit)		
F.06	Adjust injectors (Cummins)		
F.07	Adjust governor (Cummins, Mack, Caterpillar)		
F.08	Remove and replace injectors		
F.09	Clean injectors		
F.10	Adjust injectors		
F.11	Test fuel injectors		
F.12	Install and time fuel injection pump		
F.13	Bleed fuel system		
F.14	Remove and install fuel transfer pump		
F.15	Service turbochargers		
F.16	Replace fuel lines (high and low pressure)		
F.17	Replace fuel filters		
F.18	Clean fuel tanks		
F.19	Remove and replace fuel level sending unit		
F.20	Remove and replace fuel injection computer		
F.21	Test wiring harness of electronic fuel injection computer		

OCCUPATION: ENGINE REPAIRMAN

DUTY: Perform Engine Tune-Up (Continued)

CODE	TASK	TAUGHT	COMMENTS
F.22	Remove and replace wiring harness of electronic fuel injection system		

OCCUPATION: **ENGINE REPAIRMAN**

DUTY: **Rebuild Engine**

CODE	TASK	TAUGHT	COMMENTS
G.01	Disassemble engine, clean components to make parts ready for inspection		
G.02	Inspect block bores and surfaces and make decision on repairs		
G.03	Inspect block machine work and install cam bearings, core, and gallery plugs		
G.04	Inspect cylinder liner and make decision on reuse		
G.05	Recondition cylinder liner by boring and/or honing		
G.06	Inspect piston skirts, ring grooves, and pin bores and make decision on reuse		
G.07	Inspect connecting rods and make decision on reuse		
G.08	Inspect crankshaft for cracks, wear, and straightness, and make decision for reconditioning work		
G.09	Inspect machine work on reconditioned crankshaft		
G.10	Install bearings, crankshaft, piston coolers, liners, rings, pistons, and rods, fitting all components to manufacturer's specifications		
G.11	Make in-frame inspection of bearing wear and install new bearings		
G.12	Remove, inspect, and install balancer shafts		
G.13	Remove, inspect, and install vibration dampers		
G.14	Inspect flywheel for wear, cracks, and ring gear condition and make decision on repairs		
G.15	Inspect, repair, and install flywheel housing centered to crankshaft		

OCCUPATION: ENGINE REPAIRMAN

DUTY: Rebuild Engine (Continued)

CODE	TASK	TAUGHT	COMMENTS
G.16	Inspect machine work on reconditioned flywheel, install ring gear, mount flywheel, and check runout		
G.17	Inspect camshaft for cracks, wear, and warpage		
G.18	Install camshafts and adjust end play to manufacturer's specifications		
G.19	Inspect gear train, check backlash, and align timing marks		
G.20	Inspect lifters or followers for wear and cracks; replace pins, bushings, and rollers; install lifter assemblies; inspect push rods and make decision on reuse		
G.21	Inspect manifolds for cracks and mounting surfaces for warpage; install new water, intake, and exhaust manifold gaskets; and install thermostat and seal in water manifold		
G.22	Inspect gear covers, pans, and sumps for cracks and mounting surfaces for warpage		
G.23	Install engine seals		
G.24	Rebuild and install oil pump		
G.25	Inspect, remove, rebuild and install water pump		
G.26	Remove oil cooler core and test; inspect housing and reassemble oil cooler		
G.27	Inspect blower, make decision on repairs, install rebuild kit, make clearance adjustments		
G.28	Remove accessory drive, replace bearing, install accessory drive and seals, and make necessary adjustments		
G.29	Run in new or rebuilt diesel engine		
G.30	Test engine with dynamometer		

OCCUPATION: **ENGINE REPAIRMAN**

DUTY: **Maintain and Service Vehicle Accessories**

CODE	TASK	TAUGHT	COMMENTS
L.01	Interpret schematics of systems		
L.02	Check/repair tractor/trailer lights		
L.03	Remove and replace electrical relay		
L.04	Remove and replace or repair turn signal unit		
L.05	Rewire "7" way trailer plug and cord		
L.06	Remove and replace dash gauges and switches		

OCCUPATION: TUNE-UP TECHNICIAN (FUEL SYSTEMS)

DUTY: Perform Pre-Service/Repair Tests

CODE	TASK	TAUGHT	COMMENTS
A.01	Measure generator/alternator output		
A.02	Test glow plugs		
A.03	Test fuel pump		
A.04	Test coolant		
A.05	Check oil pressure		
A.06	Test engine compression		
A.07	Test for cylinder leakage		
A.08	Test engine vacuum or manifold pressure		
A.09	Test for cylinder balance		
A.10	Check engine timing		

OCCUPATION: TUNE-UP TECHNICIAN (FUEL SYSTEMS)

DUTY: Maintain and Service Cooling System

CODE	TASK	TAUGHT	COMMENTS
B.01	Replace fan and auxiliary belts		
B.02	Check intercooler core		
B.03	Replace water filter		
B.04	Replace radiator		
B.05	Reverse flush radiator		
B.06	Replace thermostat		
B.07	Replace expansion plugs		
B.08	Test cooling system		
B.09	Replace radiator hose		
B.10	Test radiator pressure cap		

OCCUPATION: TUNE-UP TECHNICIAN (FUEL SYSTEMS)

DUTY: Maintain and Service Cylinder Heads

CODE	TASK	TAUGHT	COMMENTS
D.01	Remove and replace head		
D.02	Check head for cracks		
D.03	Check head for warp		
D.04	Water test cylinder heads		
D.05	Inspect rocker arms and shafts for cracks and wear, recondition wear surfaces, replace shaft bushings, and install assembly to head		
D.06	Remove valves from head		
D.07	Check valve guide wear		
D.08	Replace valve guides		
D.09	Grind valves		
D.10	Grind valve seats		
D.11	Test/replace valve springs		

OCCUPATION: TUNE-UP TECHNICIAN (FUEL SYSTEMS)

DUTY: Perform Engine Tune-Up

CODE	TASK	TAUGHT	COMMENTS
F.01	Adjust valves according to manufacturer's specifications		
F.02	Time fuel injectors (Detroit)		
F.03	Make preliminary governor adjustment (Detroit)		
F.04	Adjust injector control racks (Detroit)		
F.05	Make final governor adjustments (Detroit)		
F.06	Adjust injectors (Cummins)		
F.07	Adjust governor (Cummins, Mack, Caterpillar)		
F.08	Remove and replace injectors		
F.09	Clean injectors		
F.10	Adjust injectors		
F.11	Test fuel injectors		
F.12	Install and time fuel injection pump		
F.13	Bleed fuel system		
F.14	Remove and install fuel transfer pump		
F.15	Service turbochargers		
F.16	Replace fuel lines (high and low pressure)		
F.17	Replace fuel filters		
F.18	Clean fuel tanks		
F.19	Remove and replace fuel level sending unit		
F.20	Remove and replace fuel injection computer		
F.21	Test wiring harness of electronic fuel injection computer		

OCCUPATION: TUNE-UP TECHNICIAN (FUEL SYSTEMS)

DUTY: Perform Engine Tune-Up (Continued)

CODE	TASK	TAUGHT	COMMENTS
F.22	Remove and replace wiring harness of electronic fuel injection system		

OCCUPATION: TUNE-UP TECHNICIAN (FUEL SYSTEMS)

DUTY: Perform General Maintenance Tasks

CODE	TASK	TAUGHT	COMMENTS
I.01	Adjust wheel bearings		
I.02	Re-pack wheel bearings		
I.03	Check tires for pressure, wear, and defects		
I.04	Service universal joints and lubricate chassis		
I.05	Change engine oil and filters		
I.06	Drain, refill, and check transmission/ differential lubricant levels		
I.07	Drain air tanks		
I.08	Service the air drier		
I.09	Adjust clutch for free play		
I.10	Adjust stop brake		
I.11	Adjust parking brake		
I.12	Clean engine		
I.13	Remove and install exhaust pipe		
I.14	Remove and install muffler and tail pipe		
I.15	Fill out repair orders		
I.16	Complete parts requisition forms		
I.17	Read and interpret parts arrangement prints, service manuals, and service assemoly instructions		
I.18	Lubricate fan bearings		
I.19	Identify tire, rim, type, and size		
I.20	Install wheel on truck using impact tool		

OCCUPATION: **TUNE-UP TECHNICIAN (FUEL SYSTEMS)**

DUTY: **Perform General Maintenance Tasks (Continued)**

CODE	TASK	TAUGHT	COMMENTS
I.21	Use tire changer and/or hand tools to remove and replace tire and tubes		
I.22	Inspect and/or repair tires or tubes		

OCCUPATION: TUNE-UP TECHNICIAN (FUEL SYSTEMS)

DUTY: Maintain and Service the Charging Circuit

CODE	TASK	TAUGHT	COMMENTS
J.01	Replace amperage gauge		
J.02	Remove, repair, and replace alternator		
J.03	Test charging circuit		
J.04	Service batteries and cables		
J.05	Interpret schematics of charging system		

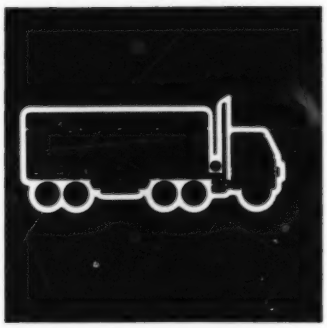
OCCUPATION: TUNE-UP TECHNICIAN (FUEL SYSTEMS)

DUTY: Maintain and Service the Starting Circuit

CODE	TASK	TAUGHT	COMMENTS
K.01	Check ignition switch		
K.02	Check safety switches		
K.03	Check solenoid		
K.04	Remove, repair, and replace starter		
K.05	Perform starter current-draw test on vehicle		
K.06	Replace starter motor solenoid		
K.07	Interpret schematics for starting circuits		

DUTY/TASK LIST

DIESEL MECHANICS SERIES



OCCUPATION 8: HYDRAULICS REPAIRMAN

DUTIES:
- J. Maintain and Service the Charging Circuit
- L. Maintain and Service Vehicle Accessories
- P. Maintain and Service Hydraulics System

OKLAHOMA OCCUPATIONAL TESTING CENTER

OCCUPATION: **HYDRAULICS REPAIRMAN**

DUTY: **Maintain and Service the Charging Circuit**

CODE	TASK	TAUGHT	COMMENTS
J.01	Replace amperage gauge		
J.02	Remove, repair, and replace alternator		
J.03	Test charging circuit		
J.04	Service batteries and cables		
J.05	Interpret schematics of charging system		

OCCUPATION: HYDRAULICS REPAIRMAN

DUTY: Maintain and Service Vehicle Accessories

CODE	TASK	TAUGHT	COMMENTS
L.01	Interpret schematics of systems		
L.02	Check/repair tractor/trailer lights		
L.03	Remove and replace electrical relay		
L.04	Remove and replace or repair turn signal unit		
L.05	Rewire "7" way trailer plug and cord		
L.06	Remove and replace dash gauges and switches		

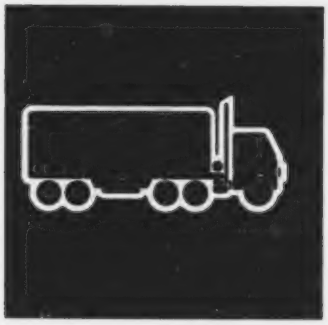
OCCUPATION: HYDRAULICS REPAIRMAN

DUTY: Maintain and Service Hydraulics System

CODE	TASK	TAUGHT	COMMENTS
P.01	Troubleshoot hydraulics system		
P.02	Remove, repair, and replace system components		
P.03	Read schematics for hydraulics system		
P.04	Maintain fluid levels		
P.05	Identify types of lines and fittings		

DUTY/TASK LIST

DIESEL MECHANICS SERIES



OCCUPATION 9: FRAME, SUSPENSION (BRAKES), & STEERING REPAIRMAN

DUTIES:
- E. Maintain and Service Drive Train
- H. Maintain and Service Steering, Suspension, and Chassis
- I. Perform General Maintenance Tasks
- N. Service and Maintain Air Brakes

OKLAHOMA OCCUPATIONAL TESTING CENTER

OCCUPATION: FRAME, SUSPENSION (BRAKES), & STEERING REPAIRMAN

DUTY: Maintain and Service Drive Train

CODE	TASK	TAUGHT	COMMENTS
E.01	Remove and reinstall transmission		
E.02	Remove and replace single-plate clutch (transmission removed)		
E.03	Remove and replace two-plate clutch (transmission removed)		
E.04	Replace flywheel drive lugs for two-plate clutch		
E.05	Align engine flywheel housing		
E.06	Remove and replace clutch release bearing		
E.07	Replace pilot bearing		
E.08	Rebuild 4- or 5-speed manual transmission for medium-duty truck		
E.09	Rebuild auxiliary transmission		
E.10	Remove and replace transmission air shift mechanisms		
E.11	Rebuild air shift mechanism		
E.12	Overhaul twin countershaft transmission		
E.13	Overhaul three countershaft transmission		
E.14	Replace transmission input shaft separate from transmission overhaul		
E.15	Replace speedometer drive gear separate from transmission overhaul		
E.16	Remove and replace shift lever housing from transmission separate from transmission overhaul		
E.17	Rebuild shift lever housing		
E.18	Remove, repair, and replace remote shifter		

OCCUPATION: FRAME, SUSPENSION (BRAKES), & STEERING REPAIRMAN

DUTY: Maintain and Service Drive Train (Continued)

CODE	TASK	TAUGHT	COMMENTS
E.19	Remove and replace automatic transmission		
E.20	Rebuild automatic and/or power shift transmission		
E.21	Rebuild torque converter (non-sealed units)		
E.22	Remove and reinstall driveline		
E.23	Set angularity of driveline		
E.24	Remove and replace universal joints		
E.25	Remove and replace yoke (driveline removed)		
E.26	Remove and replace driveline center bearings		
E.27	Remove and replace rear differential carrier assembly in tandem		
E.28	Rebuild rear differential carrier assembly		
E.29	Remove and reinstall front differential carrier assembly in tandem		
E.30	Rebuild front differential carrier assembly		
E.31	Remove and reinstall inter-axle differential		
E.32	Rebuild inter-axle differential		
E.33	Rebuild limited slip differential		
E.34	Replace pinion seal separate from carrier overhaul		
E.35	Remove, repair, and replace power take-off assembly		

OCCUPATION: FRAME, SUSPENSION (BRAKES), & STEERING REPAIRMAN

DUTY: Maintain and Service Steering, Suspension, and Chassis

CODE	TASK	TAUGHT	COMMENTS
H.01	Check and correct power steering belt tension		
H.02	Check and correct power steering fluid level		
H.03	Replace tie rod ends		
H.04	Replace center link		
H.05	Replace idler arm		
H.06	Replace shock absorber		
H.07	Diagnose steering and suspension problems		
H.08	Set toe-in to manufacturer's specifications		
H.09	Check steering linkage		
H.10	Rebuild steering sector box		
H.11	Adjust steering sector box on vehicle		
H.12	Repair and/or adjust drag link		
H.13	Remove and replace steering shaft and bearings		
H.14	Remove and replace king pin and bushings		
H.15	Remove and replace front axle		
H.16	Repair or rebuild spring assembly and shackles, hangers, and pads		
H.17	Remove and replace torque arm bushing		
H.18	Align rear axle assemblies		
H.19	Repair fifth wheel		
H.20	Repair or replace power steering components		

OCCUPATION: FRAME, SUSPENSION (BRAKES), & STEERING REPAIRMAN

DUTY: Perform General Maintenance Tasks

CODE	TASK	TAUGHT	COMMENTS
I.01	Adjust wheel bearings		
I.02	Re-pack wheel bearings		
I.03	Check tires for pressure, wear, and defects		
I.17	Read and interpret parts arrangement prints, service manuals, and service assembly instructions		
I.19	Identify tire, rim, type, and size		

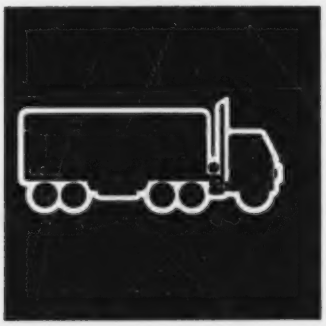
OCCUPATION: **FRAME, SUSPENSION (BRAKES), & STEERING REPAIRMAN**

DUTY: **Service and Maintain Air Brakes**

CODE	TASK	TAUGHT	COMMENTS
N.01	Test and diagnose air brake system		
N.02	Remove and replace air compressor		
N.03	Service air brake system plumbing		
N.04	Remove and replace service brake chamber diaphragm		
N.05	Remove and replace brake shoes		
N.06	Overhaul air brake actuator assemblies		
N.07	Remove, rebuild, and replace spring brake chambers		
N.08	Remove, replace, or adjust air governor		
N.09	Repair, replace, or adjust air pressure relief valve		
N.10	Interpret schematics for air brakes		

DUTY/TASK LIST

DIESEL MECHANICS SERIES



OCCUPATION 10: SERVICE/MAINTENANCE PERSON (TIRES & DETAIL)

DUTIES:
- A. Perform Pre-Service/Repair Tests
- B. Maintain and Service Cooling System
- E. Maintain and Service Drive Train
- F. Perform Engine Tune-Up
- I. Perform General Maintenance Tasks
- J. Maintain and Service the Charging Circuit
- K. Maintain and Service the Starting Circuit
- M. Service and Maintain Hydraulic Brakes

OCCUPATION: SERVICE/MAINTENANCE PERSON (TIRES & DETAIL)

DUTY: Perform Pre-Service/Repair Tests

CODE	TASK	TAUGHT	COMMENTS
A.01	Measure generator/alternator output		
A.02	Test glow plugs		
A.03	Test fuel pump		
A.04	Test coolant		
A.05	Check oil pressure		
A.06	Test engine compression		
A.07	Test for cylinder leakage		
A.08	Test engine vacuum or manifold pressure		
A.09	Test for cylinder balance		
A.10	Check engine timing		

OCCUPATION: SERVICE/MAINTENANCE PERSON (TIRES & DETAIL)

DUTY: Maintain and Service Cooling System

CODE	TASK	TAUGHT	COMMENTS
B.01	Replace fan and auxiliary belts		
B.02	Check intercooler core		
B.03	Replace water filter		
B.04	Replace radiator		
B.05	Reverse flush radiator		
B.06	Replace thermostat		
B.07	Replace expansion plugs		
B.08	Test cooling system		
B.09	Replace radiator hose		
B.10	Test radiator pressure cap		

OCCUPATION: SERVICE/MAINTENANCE PERSON (TIRES & DETAIL)

DUTY: Maintain and Service Drive Train

CODE	TASK	TAUGHT	COMMENTS
E.35	Remove, repair, and replace power take-off assembly		

OCCUPATION: **SERVICE/MAINTENANCE PERSON (TIRES & DETAIL)**

DUTY: **Perform Engine Tune-Up**

CODE	TASK	TAUGHT	COMMENTS
F.15	Service turbochargers		
F.16	Replace fuel lines (high and low pressure)		
F.17	Replace fuel filters		
F.18	Clean fuel tanks		
F.19	Remove and replace fuel level sending unit		
F.20	Remove and replace fuel injection computer		

OCCUPATION: **SERVICE/MAINTENANCE PERSON (TIRES & DETAIL)**

DUTY: **Perform General Maintenance Tasks**

CODE	TASK	TAUGHT	COMMENTS
I.01	Adjust wheel bearings		
I.02	Re-pack wheel bearings		
I.03	Check tires for pressure, wear, and defects		
I.04	Service universal joints and lubricate chassis		
I.05	Change engine oil and filters		
I.06	Drain, refill, and check transmission/ differential lubricant levels		
I.07	Drain air tanks		
I.08	Service the air drier		
I.09	Adjust clutch for free play		
I.10	Adjust stop break		
I.11	Adjust parking brake		
I.12	Clean engine		
I.13	Remove and install exhaust pipe		
I.14	Remove and install muffler and tail pipe		
I.15	Fill out repair orders		
I.16	Complete parts requisition forms		
I.17	Read and interpret parts arrangement prints, service manuals, and service assembly instructions		
I.18	Lubricate fan bearings		
I.19	Identify tire, rim, type, and size		
I.20	Install wheel on truck using impact tool		

OCCUPATION: **SERVICE/MAINTENANCE PERSON (TIRES & DETAIL)**

DUTY: **Perform General Maintenance Tasks (Continued)**

CODE	TASK	TAUGHT	COMMENTS
I.21	Use tire changer and/or hand tools to remove and replace tire and tubes		
I.22	Inspect and/or repair tires or tubes		

OCCUPATION: **SERVICE/MAINTENANCE PERSON (TIRES & DETAIL)**

DUTY: **Maintain and Service the Charging Circuit**

CODE	TASK	TAUGHT	COMMENTS
J.04	Service batteries and cables		

OCCUPATION: SERVICE/MAINTENANCE PERSON (TIRES & DETAIL)

DUTY: Maintain and Service the Starting Circuit

CODE	TASK	TAUGHT	COMMENTS
K.05	Perform starter current-draw test on vehicle		

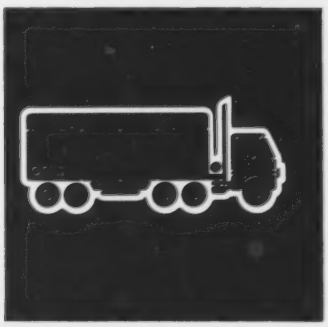
OCCUPATION: SERVICE/MAINTENANCE PERSON (TIRES & DETAIL)

DUTY: Service and Maintain Hydraulic Brakes

CODE	TASK	TAUGHT	COMMENTS
M.10	Service drums, calipers, and rotors		

DUTY/TASK LIST

DIESEL MECHANICS SERIES



OCCUPATION 11: FARM EQUIPMENT REPAIR PERSON

DUTIES:
- A. Perform Pre-Service/Repair Tests
- B. Maintain and Service Cooling System
- D. Maintain and Service Cylinder Heads
- F. Perform Engine Tune-Up
- G. Rebuild Engine
- H. Maintain and Service Steering, Suspension, and Chassis
- I. Perform General Maintenance Tasks
- J. Maintain and Service the Charging Circuit
- K. Maintain and Service the Starting Circuit
- L. Maintain and Service Vehicle Accessories
- M. Service and Maintain Hydraulic Brakes
- O. Maintain and Service Cab Climate System
- P. Maintain and Service Hydraulics System

OKLAHOMA OCCUPATIONAL TESTING CENTER

OCCUPATION: FARM EQUIPMENT REPAIR PERSON

DUTY: Perform Pre-Service/Repair Tests

CODE	TASK	TAUGHT	COMMENTS
A.01	Measure generator/alternator output		
A.02	Test glow plugs		
A.03	Test fuel pump		
A.04	Test coolant		
A.05	Check oil pressure		
A.06	Test engine compression		
A.07	Test for cylinder leakage		
A.08	Test engine vacuum or manifold pressure		
A.09	Test for cylinder balance		
A.10	Check engine timing		

OCCUPATION: FARM EQUIPMENT REPAIR PERSON

DUTY: Maintain and Service Cooling System

CODE	TASK	TAUGHT	COMMENTS
B.01	Replace fan and auxiliary belts		
B.02	Check intercooler core		
B.03	Replace water filter		
B.04	Replace radiator		
B.05	Reverse flush radiator		
B.06	Replace thermostat		
B.07	Replace expansion plugs		
B.08	Test cooling system		
B.09	Replace radiator hose		
B.10	Test radiator pressure cap		

OCCUPATION: **FARM EQUIPMENT REPAIR PERSON**

DUTY: **Maintain and Service Cylinder Heads**

CODE	TASK	TAUGHT	COMMENTS
D.01	Remove and replace head		
D.02	Check head for cracks		
D.03	Check head for warp		
D.04	Water test cylinder heads		
D.05	Inspect rocker arms and shafts for cracks and wear, recondition wear surfaces, replace shaft bushings, and install assembly to head		
D.06	Remove valves from head		
D.07	Check valve guide wear		
D.08	Replace valve guides		
D.09	Grind valves		
D.10	Grind valve seats		
D.11	Test/replace valve springs		

OCCUPATION: FARM EQUIPMENT REPAIR PERSON

DUTY: Perform Engine Tune-Up

CODE	TASK	TAUGHT	COMMENTS
F.01	Adjust valves according to manufacturer's specifications		
F.02	Time fuel injectors (Detroit)		
F.03	Make preliminary governor adjustment (Detroit)		
F.04	Adjust injector control racks (Detroit)		
F.05	Make final governor adjustments (Detroit)		
F.06	Adjust injectors (Cummins)		
F.07	Adjust governor (Cummins, Mack, Caterpillar)		
F.08	Remove and replace injectors		
F.09	Clean injectors		
F.10	Adjust injectors		
F.11	Test fuel injectors		
F.12	Install and time fuel injection pump		
F.13	Bleed fuel system		
F.14	Remove and install fuel transfer pump		
F.15	Service turbochargers		
F.16	Replace fuel lines (high and low pressure)		
F.17	Replace fuel filters		
F.18	Clean fuel tanks		
F.19	Remove and replace fuel level sending unit		
F.20	Remove and replace fuel injection computer		
F.21	Test wiring harness of electronic fuel injection computer		

OCCUPATION: **FARM EQUIPMENT REPAIR PERSON**

DUTY: **Perform Engine Tune-Up (Continued)**

CODE	TASK	TAUGHT	COMMENTS
F.22	Remove and replace wiring harness of electronic fuel injection system		

OCCUPATION: FARM EQUIPMENT REPAIR PERSON

DUTY: Rebuild Engine

CODE	TASK	TAUGHT	COMMENTS
G.01	Disassemble engine, clean components to make parts ready for inspection		
G.02	Inspect block bores and surfaces and make decision on repairs		
G.03	Inspect block machine work and install cam bearings, core, and gallery plugs		
G.04	Inspect cylinder liner and make decision on reuse		
G.05	Recondition cylinder liner by boring and/or honing		
G.06	Inspect piston skirts, ring grooves, and pin bores and make decision on reuse		
G.07	Inspect connecting rods and make decision on reuse		
G.08	Inspect crankshaft for cracks, wear, and straightness, and make decision for reconditioning work		
G.09	Inspect machine work on reconditioned crankshaft		
G.10	Install bearings, crankshaft, piston coolers, liners, rings, pistons, and rods, fitting all components to manufacturer's specifications		
G.11	Make in-frame inspection of bearing wear and install new bearings		
G.12	Remove, inspect, and install balancer shafts		
G.13	Remove, inspect, and install vibration dampers		
G.14	Inspect flywheel for wear, cracks, and ring gear condition and make decision on repairs		
G.15	Inspect, repair, and install flywheel housing centered to crankshaft		

OCCUPATION: FARM EQUIPMENT REPAIR PERSON

DUTY: Rebuild Engine (Continued)

CODE	TASK	TAUGHT	COMMENTS
G.16	Inspect machine work on reconditioned flywheel, install ring gear, mount flywheel, and check runout		
G.17	Inspect camshaft for cracks, wear, and warpage		
G.18	Install camshafts and adjust end play to manufacturer's specifications		
G.19	Inspect gear train, check backlash, and align timing marks		
G.20	Inspect lifters or followers for wear and cracks; replace pins, bushings, and rollers; install lifter assemblies; inspect push rods and make decision on reuse		
G.21	Inspect manifolds for cracks and mounting surfaces for warpage; install new water, intake, and exhaust manifold gaskets; and install thermostat and seal in water manifold		
G.22	Inspect gear covers, pans, and sumps for cracks and mounting surfaces for warpage		
G.23	Install engine seals		
G.24	Rebuild and install oil pump		
G.25	Inspect, remove, rebuild and install water pump		
G.26	Remove oil cooler core and test; inspect housing and reassemble oil cooler		
G.27	Inspect blower, make decision on repairs, install rebuild kit, make clearance adjustments		
G.28	Remove accessory drive, replace bearing, install accessory drive and seals, and make necessary adjustments		
G.29	Run in new or rebuilt diesel engine		
G.30	Test engine with dynamometer		

OCCUPATION: **FARM EQUIPMENT REPAIR PERSON**

DUTY: **Maintain and Service Steering, Suspension, and Chassis**

CODE	TASK	TAUGHT	COMMENTS
H.01	Check and correct power steering belt tension		
H.02	Check and correct power steering fluid level		
H.03	Replace tie rod ends		
H.04	Replace center link		
H.05	Replace idler arm		
H.06	Replace shock absorber		
H.07	Diagnose steering and suspension problems		
H.08	Set toe-in to manufacturer's specifications		
H.09	Check steering linkage		
H.10	Rebuild steering sector box		
H.11	Adjust steering sector box on vehicle		
H.12	Repair and/or adjust drag link		
H.13	Remove and replace steering shaft and bearings		
H.14	Remove and replace king pin and bushings		
H.15	Remove and replace front axle		
H.16	Repair or rebuild spring assembly and shackles, hangers, and pads		
H.17	Remove and replace torque arm bushing		
H.18	Align rear axle assemblies		
H.19	Repair fifth wheel		
H.20	Repair or replace power steering components		

OCCUPATION: **FARM EQUIPMENT REPAIR PERSON**

DUTY: **Perform General Maintenance Tasks**

CODE	TASK	TAUGHT	COMMENTS
I.01	Adjust wheel bearings		
I.02	Re-pack wheel bearings		
I.03	Check tires for pressure, wear, and defects		
I.04	Service universal joints and lubricate chassis		
I.05	Change engine oil and filters		
I.06	Drain, refill, and check transmission/ differential lubricant levels		
I.07	Drain air tanks		
I.08	Service the air drier		
I.09	Adjust clutch for free play		
I.10	Adjust stop brake		
I.11	Adjust parking brake		
I.12	Clean engine		
I.13	Remove and install exhaust pipe		
I.14	Remove and install muffler and tail pipe		
I.15	Fill out repair orders		
I.16	Complete parts requisition forms		
I.17	Read and interpret parts arrangement prints, service manuals, and service assembly instructions		
I.18	Lubricate fan bearings		
I.19	Identify tire, rim, type, and size		
I.20	Install wheel on truck using impact tool		

OCCUPATION: FARM EQUIPMENT REPAIR PERSON

DUTY: Perform General Maintenance Tasks (Continued)

CODE	TASK	TAUGHT	COMMENTS
I.21	Use tire changer and/or hand tools to remove and replace tire and tubes		
I.22	Inspect and/or repair tires or tubes		

OCCUPATION: FARM EQUIPMENT REPAIR PERSON

DUTY: Maintain and Service the Charging Circuit

CODE	TASK	TAUGHT	COMMENTS
J.01	Replace amperage gauge		
J.02	Remove, repair, and replace alternator		
J.03	Test charging circuit		
J.04	Service batteries and cables		
J.05	Interpret schematics of charging system		

OCCUPATION: FARM EQUIPMENT REPAIR PERSON

DUTY: Maintain and Service the Starting Circuit

CODE	TASK	TAUGHT	COMMENTS
K.01	Check ignition switch		
K.02	Check safety switches		
K.03	Check solenoid		
K.04	Remove, repair, and replace starter		
K.05	Perform starter current-draw test on vehicle		
K.06	Replace starter motor solenoid		
K.07	Interpret schematics for starting circuits		

OCCUPATION: FARM EQUIPMENT REPAIR PERSON

DUTY: Maintain and Service Vehicle Accessories

CODE	TASK	TAUGHT	COMMENTS
L.01	Interpret schematics of systems		
L.02	Check/repair tractor/trailer lights		
L.03	Remove and replace electrical relay		
L.04	Remove and replace or repair turn signal unit		
L.05	Rewire "7" way trailer plug and cord		
L.06	Remove and replace dash gauges and switches		

OCCUPATION: FARM EQUIPMENT REPAIR PERSON

DUTY: Service and Maintain Hydraulic Brakes

CODE	TASK	TAUGHT	COMMENTS
M.01	Identify types and grades of brake fluid		
M.02	Check master cylinder fluid unit and fill to proper level		
M.03	Inspect brake lines for condition and leaks		
M.04	Measure brake pedal height and perform required adjustments		
M.05	Bleed brakes using approved equipment and procedure		
M.06	Diagnose brake system problems - hydraulic		
M.07	Rebuild hydraulic brake master cylinder		
M.08	Rebuild hydraulic slave (wheel) cylinder		
M.09	Remove and replace power brake unit		
M.10	Service drums, calipers, and rotors		

OCCUPATION: FARM EQUIPMENT REPAIR PERSON

DUTY: Maintain and Service Cab Climate System

CODE	TASK	TAUGHT	COMMENTS
0.01	Repair or remove and replace climate control system components		
0.02	Service air filter		
0.03	Check climate control system for satisfactory operation		
0.04	Troubleshoot climate control system		
0.05	Evacuate system		
0.06	Check refrigerant level		
0.07	Recharge refrigerant		
0.08	Interpret schematics for cab climate system		

OCCUPATION: FARM EQUIPMENT REPAIR PERSON

DUTY: Maintain and Service Hydraulics System

CODE	TASK	TAUGHT	COMMENTS
P.01	Troubleshoot hydraulics system		
P.02	Remove, repair, and replace system components		
P.03	Read schematics for hydraulics system		
P.04	Maintain fluid levels		
P.05	Identify types of lines and fittings		